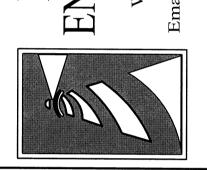
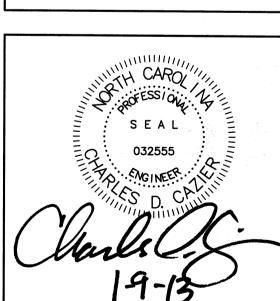


TRACOASTAL
JINEERING, PLLC
91 Pelican Point Road
nington, North Carolina 28409



XISTING CONDITIONS

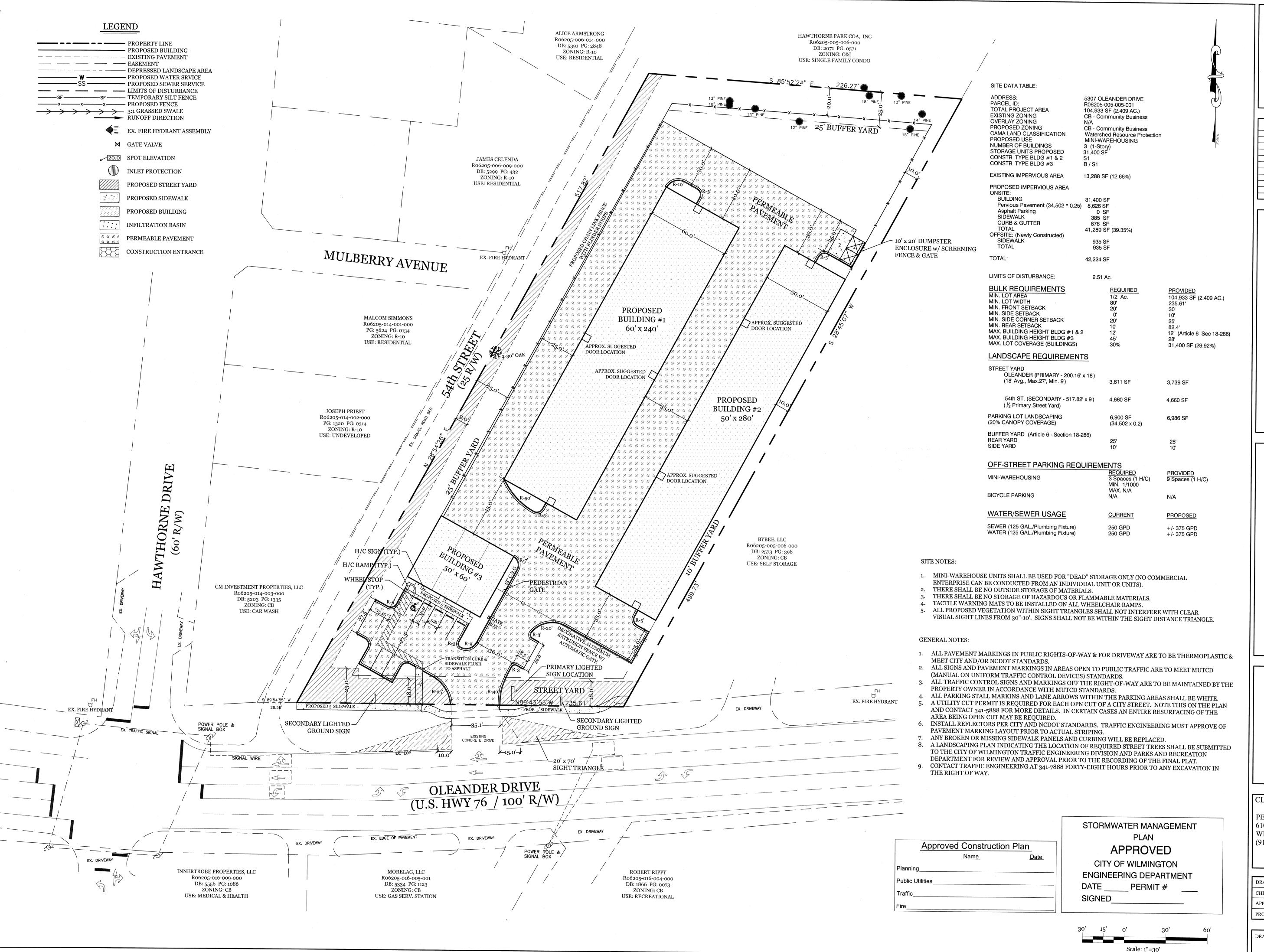
FOR
OLEANDER DRIVE
SELF STORAGE

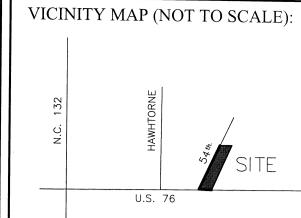


CLIENT INFORMATION:

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

DRAWN:	CDC	SHEET SIZE: 24X36	
CHECKED:	CDC	DATE: 01-09-13	
APPROVED:	CDC	SCALE: 1:30	
PROJECT NUMBER:		100-081	

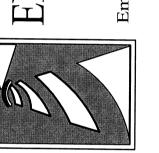




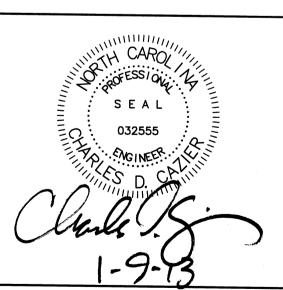
LO, PLLC
Road
Sina 28409
3567
Hengineering.com
P-0662

INTRACOAL
ENGINEERIN

91 Pelican Point R
Wilmington, North Carolir



OLEANDER DRIVE SELF STORAGE

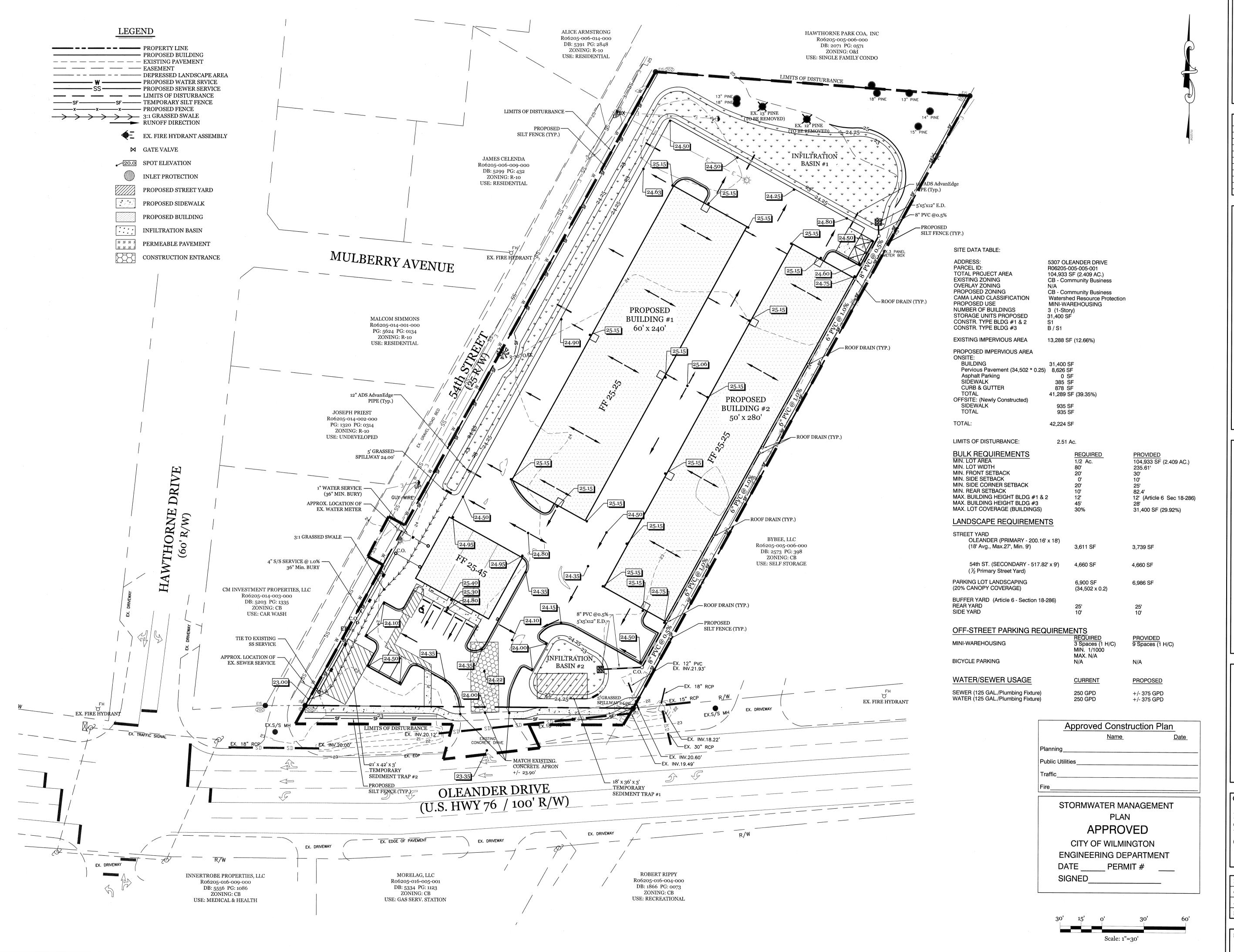


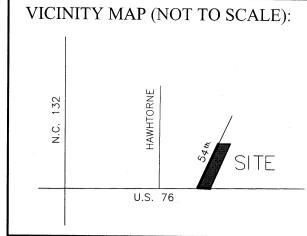
CLIENT INFORMATION:

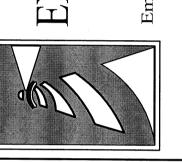
SITE

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

ı			
l	DRAWN:	CDC	SHEET SIZE: 24X36
l	CHECKED:	CDC	DATE: 01-09-13
	APPROVED:	CDC	SCALE: 1:30
	PROJECT NUMBER:		100-081







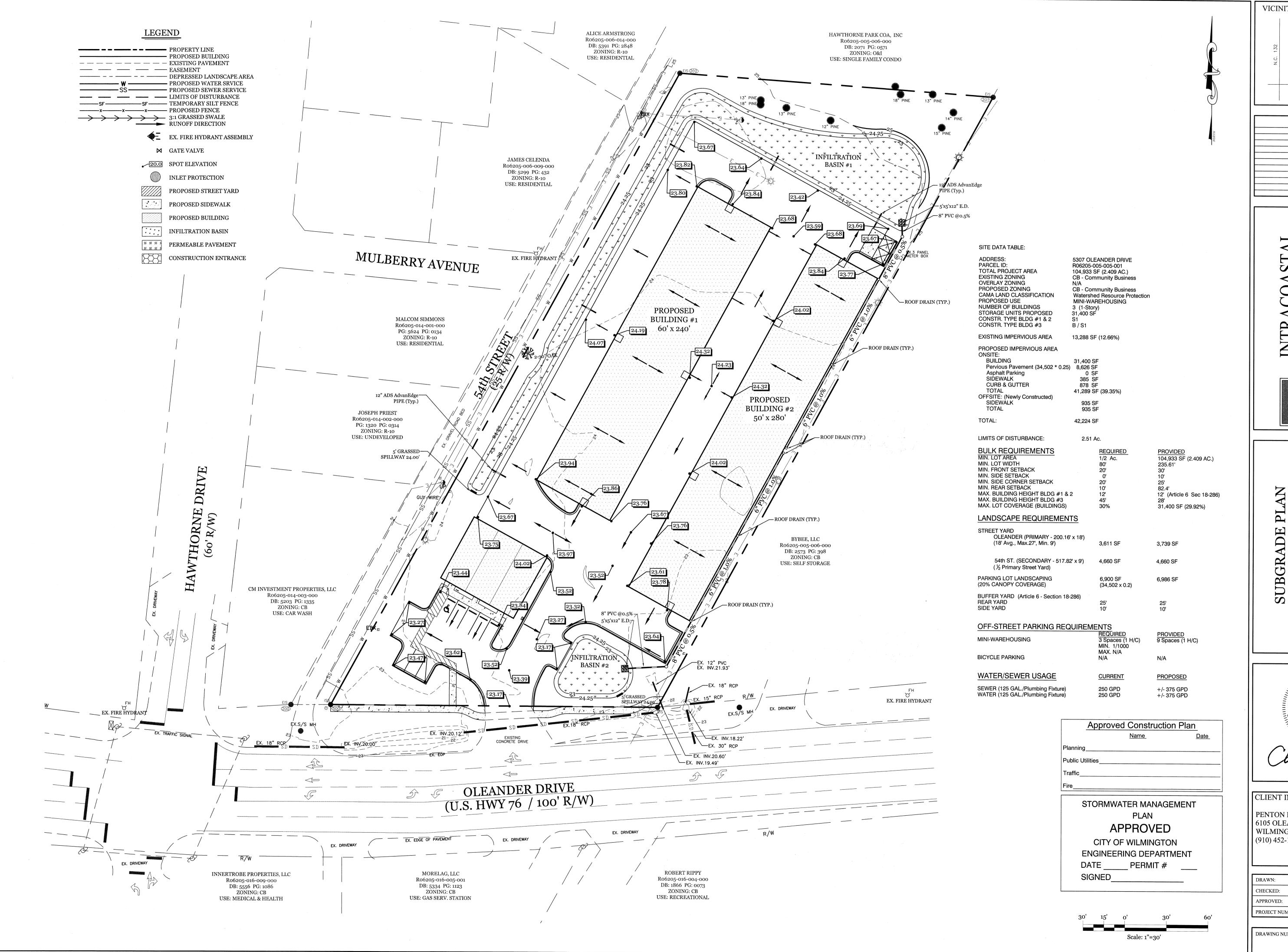
ONTRO TER PL SELF STOR GRADING, I EROSION C & STORMWA

SEAL

CLIENT INFORMATION:

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

		그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	
DRAWN:	CDC	SHEET SIZE: 24X36	
CHECKED:	CDC	DATE: 01-09-13	
APPROVED:	CDC	SCALE: 1:30	
PROJECT NUMBER:		100-081	



VICINITY MAP (NOT TO SCALE):

White the second seco

REVISIONS

TRACOASTAL
JINEERING, PLLC



H W

LEANDER DRIVE SELF STORAGE

S E A L

032555

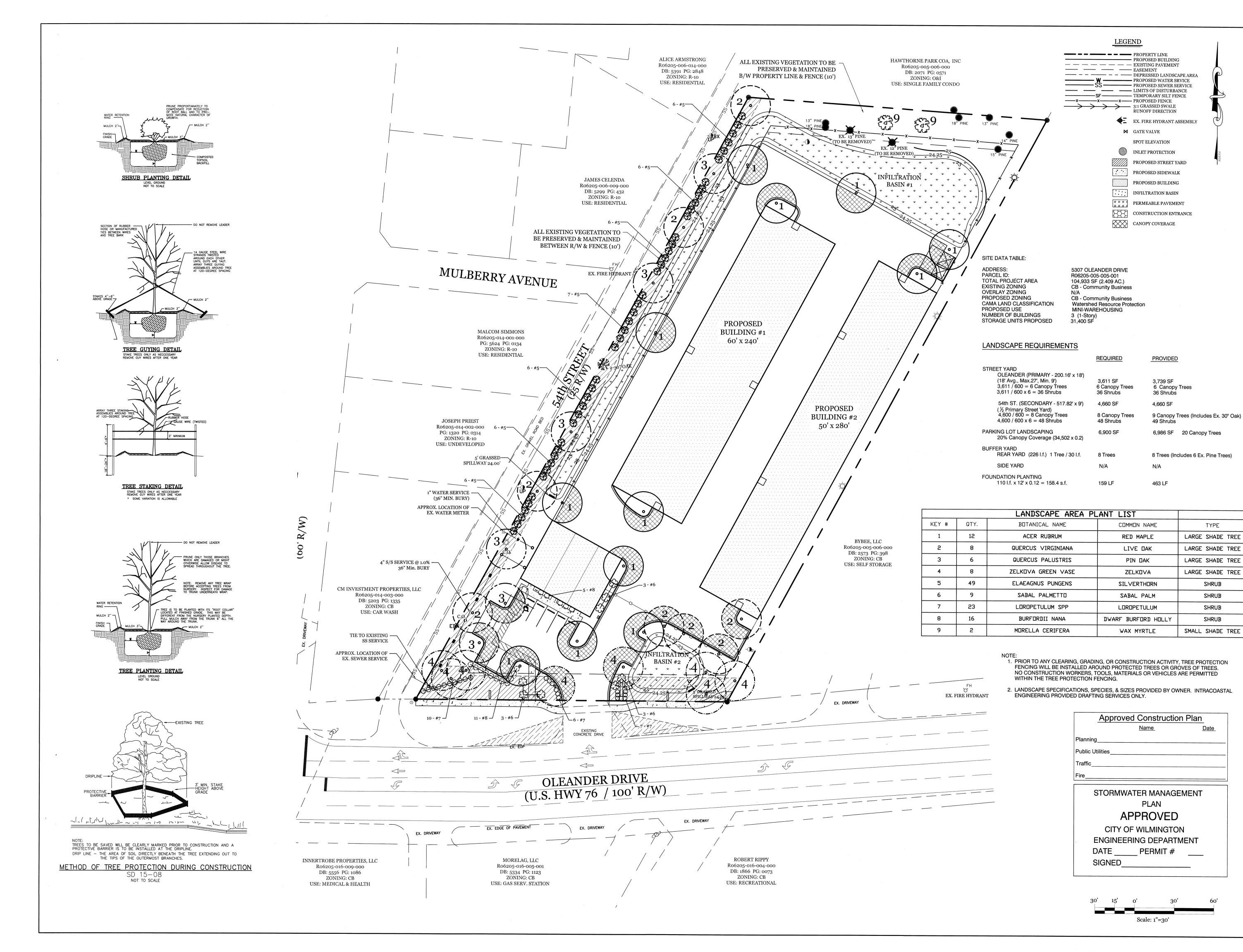
SNGINEER

1-9-12

CLIENT INFORMATION:

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

DRAWN:	CDC	SHEET SIZE:	24X36	
CHECKED:	CDC	DATE:	01-09-13	
APPROVED:	CDC	SCALE:	1:30	
PROJECT NUMBER:		100-081		



VICINITY MAP (NOT TO SCALE):

WY

SITE

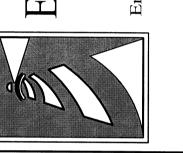
U.S. 76

REVISIONS

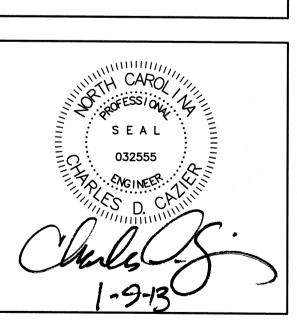
NG, PLLC
int Road
urolina 28409
9.3567
stalengineering.com
er P-0662

EINGIINEEK

91 Pelican Po
Wilmington, North C
Phone: 910.4
Phone: 910.4
Email: Charlie@intracos



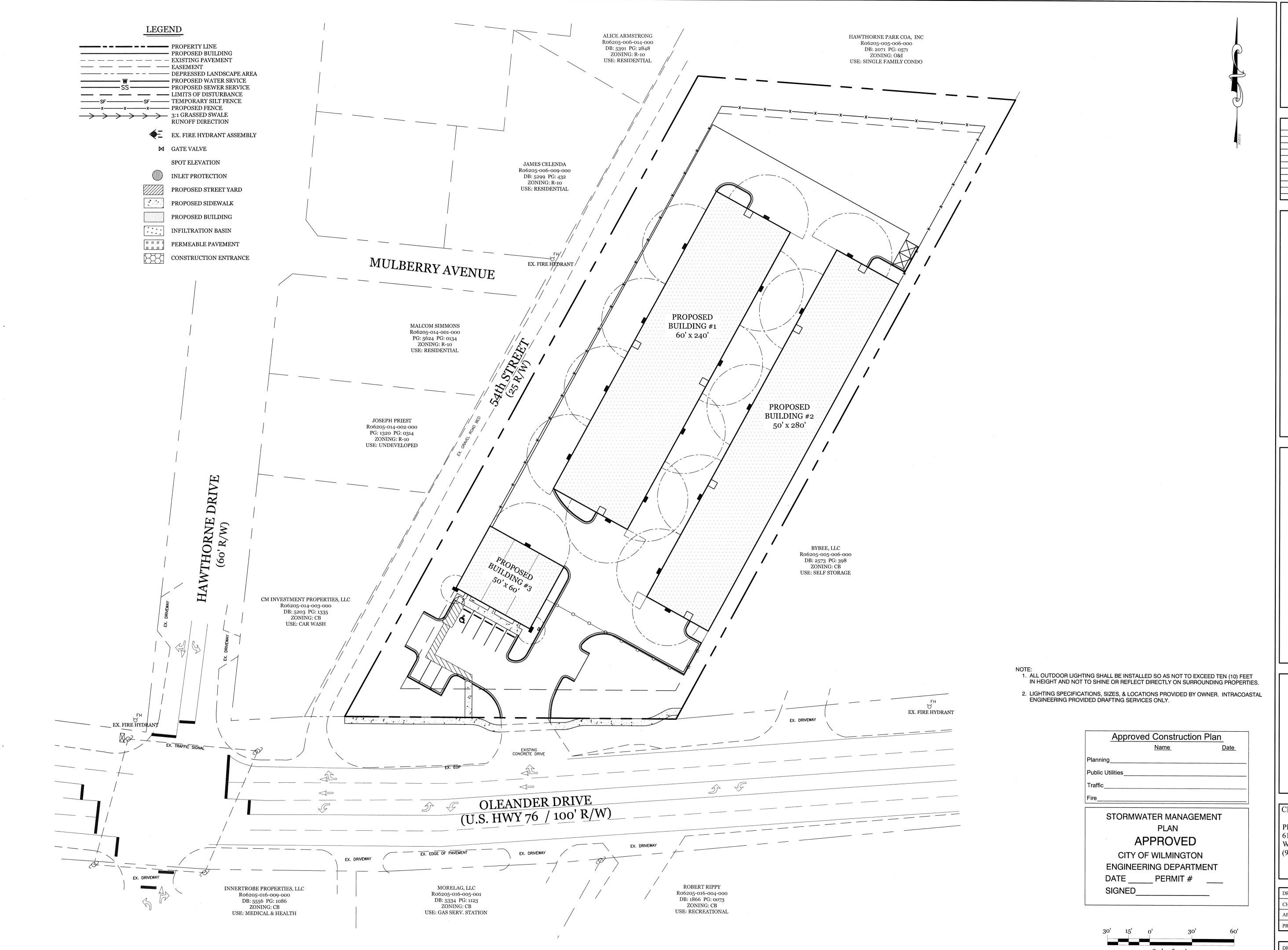
DLEANDER DRIVE SELF STORAGE

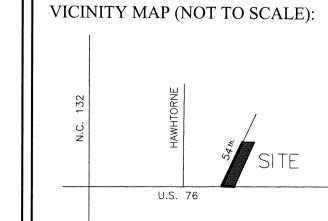


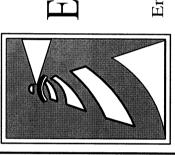
CLIENT INFORMATION:

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

DRAWN:	CDC	SHEET SIZE:	24X36	
CHECKED:	CDC	DATE:	01-09-13	
APPROVED:	CDC	SCALE:	1:30	
PROJECT NUN	MBER:	100-081		







OLEA SEL]

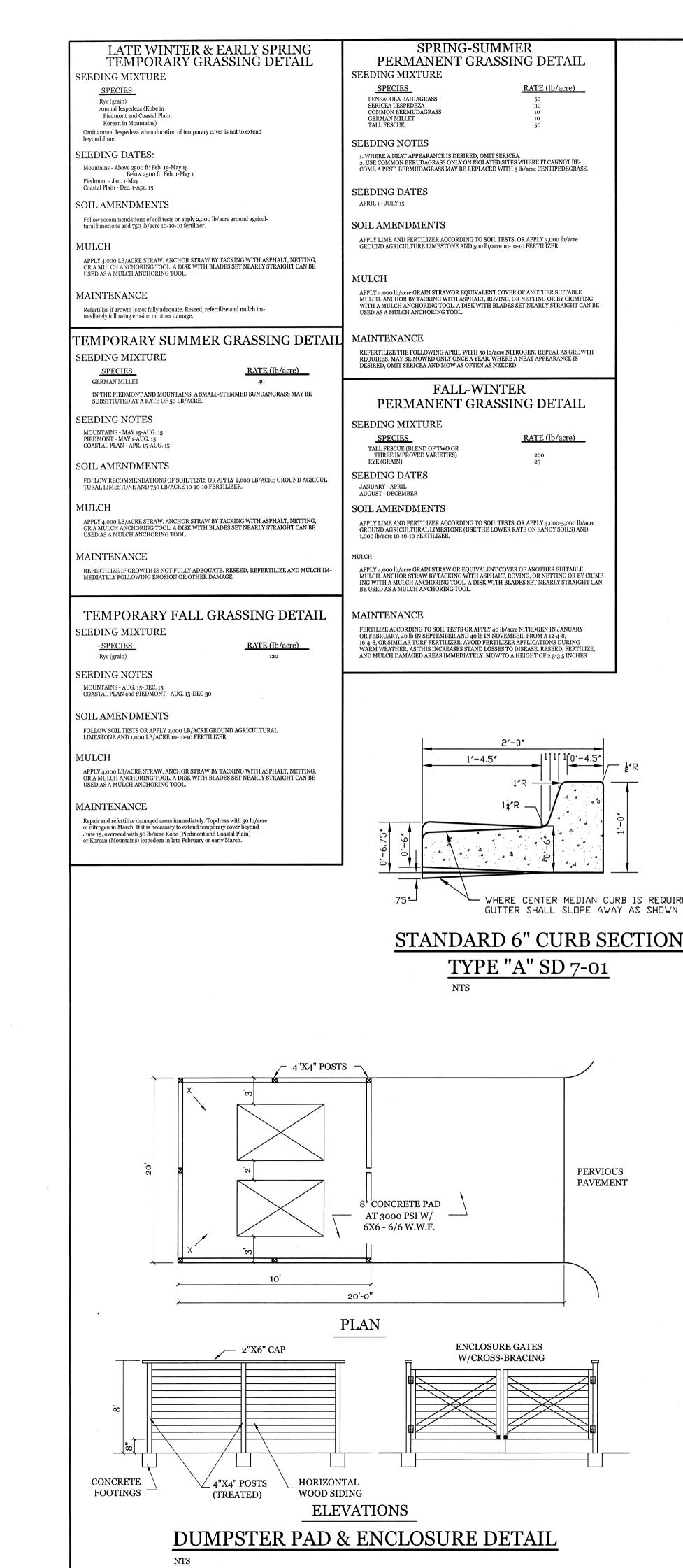
CLIENT INFORMATION:

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

DRAWN:	CDC	SHEET SIZE:	24X36
CHECKED:	CDC	DATE:	01-09-13
APPROVED:	CDC	SCALE:	1:30
PROJECT NUMBER:		100-081	

DRAWING NUMBER:

C-6



SPRING-SUMMER

FALL-WINTER

RATE (lb/acre)

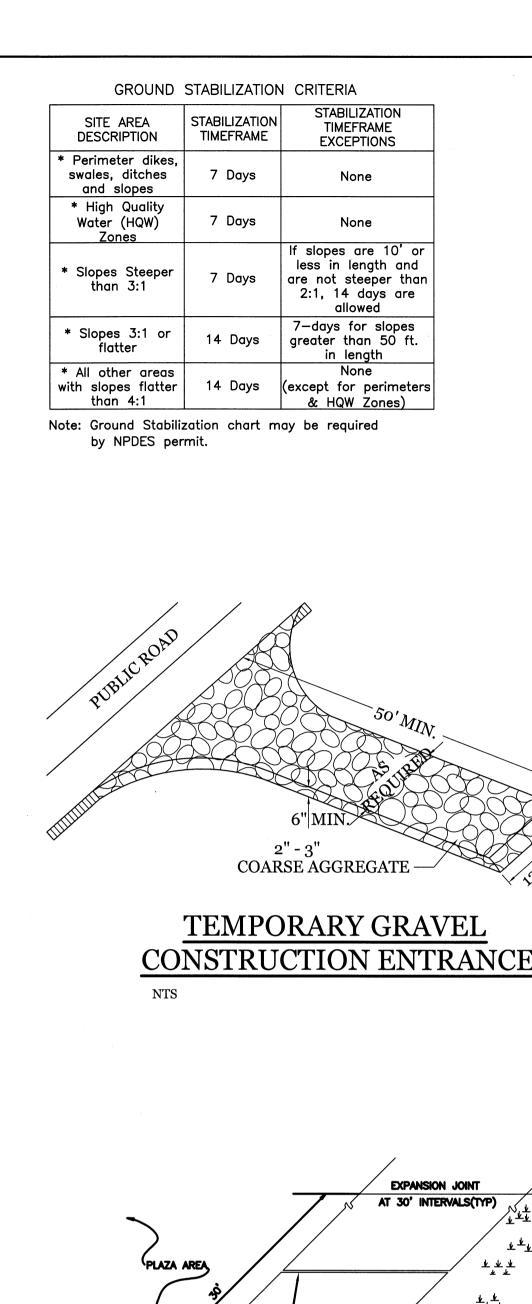
WHERE CENTER MEDIAN CURB IS REQUIRED GUTTER SHALL SLOPE AWAY AS SHOWN

> **PERVIOUS PAVEMENT**

TYPE "A" SD 7-01

ENCLOSURE GATES

W/CROSS-BRACING



PLAN VIEW

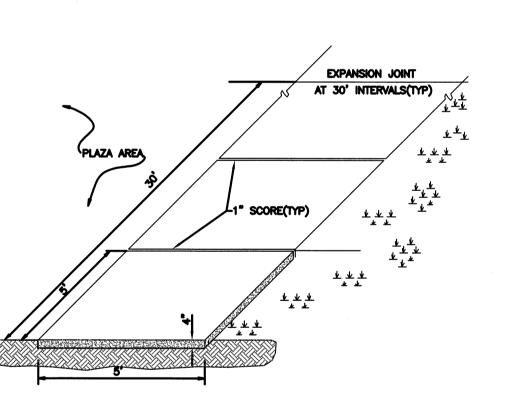
<u>6'-11"</u>

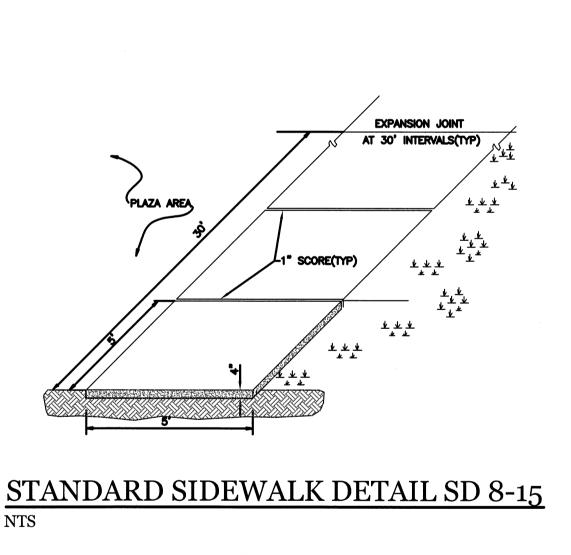
FRONT VIEW

1. CONTRACTOR SHALL INSTALL PER CITY OF WILMINGTON TECHNICAL STANDARD PER SD 15-13 2. CONTRACTOR SHALL INSTALL WHEEL STOP 2.5' FROM SIDEWALK.

WHEEL STOP DETAIL

-7/8"ø HOLES

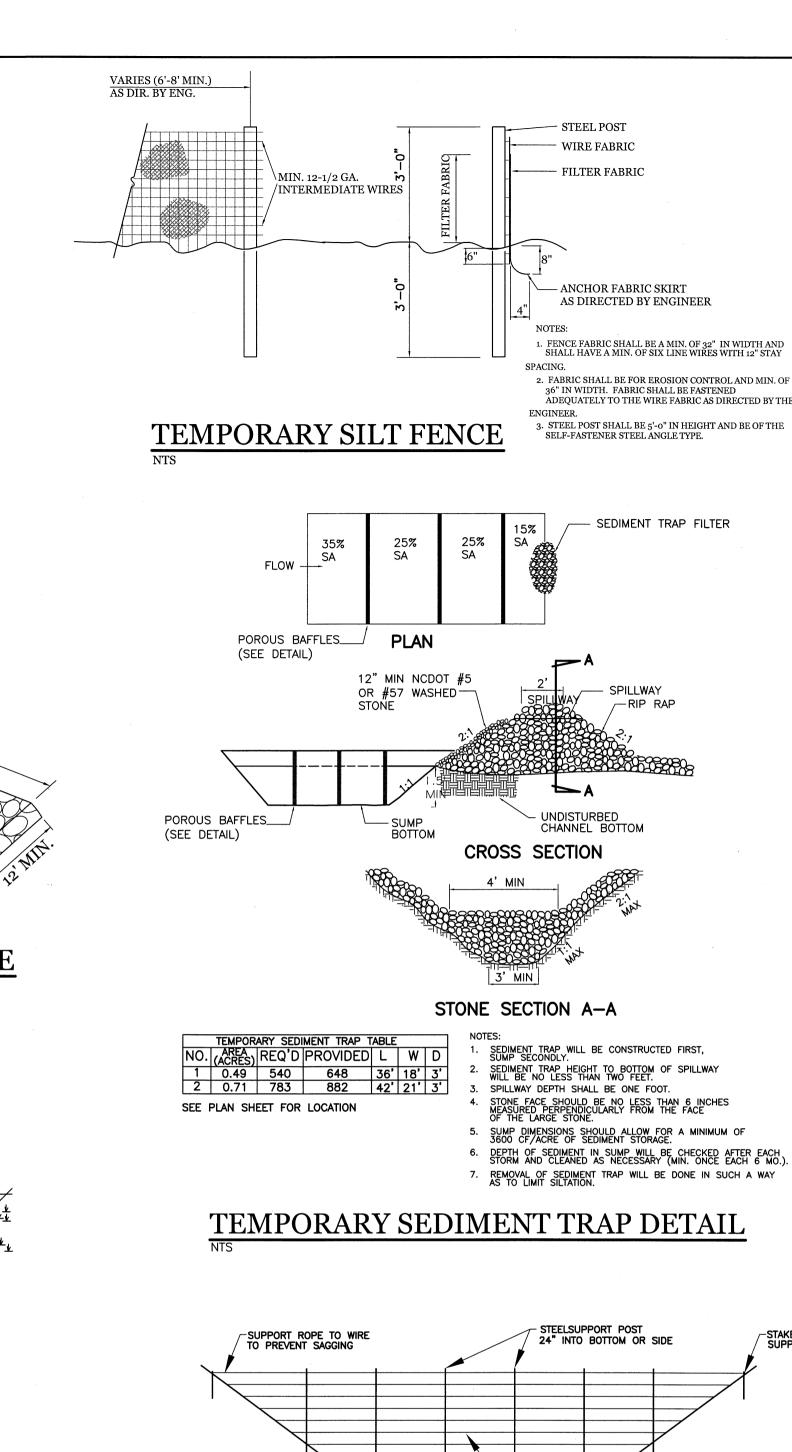


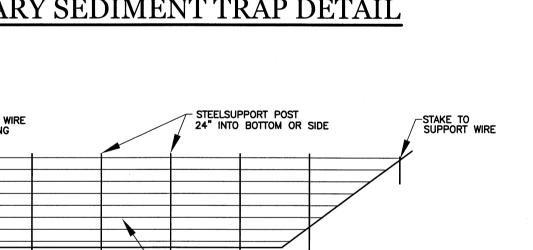


BTM OF SPILLWAY

EL. 24.25'_

EL. 24.00'

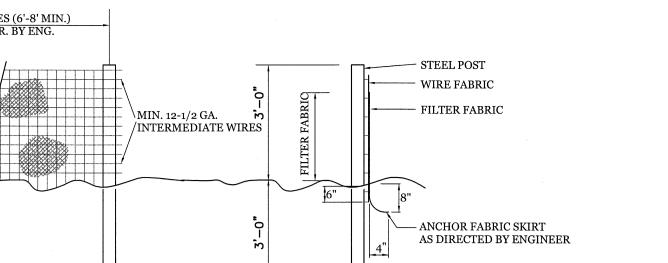




TOP OF BANK

POROUS BAFFLE CROSS SECTION

SPILLWAY DETAIL



1. FENCE FABRIC SHALL BE A MIN. OF 32" IN WIDTH AND SHALL HAVE A MIN. OF SIX LINE WIRES WITH 12" STAY 36" IN WIDTH. FABRIC SHALL BE FASTENED

SEDIMENT TRAP FILTER

STONE SECTION A-A

SEDIMENT TRAP WILL BE CONSTRUCTED FIRST, SUMP SECONDLY. SPILLWAY DEPTH SHALL BE ONE FOOT. STONE FACE SHOULD BE NO LESS THAN 6 INCHES MEASURED PERPENDICULARLY FROM THE FACE OF THE LARGE STONE.

5. SUMP DIMENSIONS SHOULD ALLOW FOR A MINIMUM OF 3600 CF/ACRE OF SEDIMENT STORAGE. 6. DEPTH OF SEDIMENT IN SUMP WILL BE CHECKED AFTER EACH STORM AND CLEANED AS NECESSARY (MIN. ONCE EACH 6 MO.) 7. REMOVAL OF SEDIMENT TRAP WILL BE DONE IN SUCH A WAY AS TO LIMIT SILTATION.

AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED. SWALES MUST BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE OF ACTIVITY ASSOCIATED WITH A SWALE. 6. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED, THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE IN THE SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO

> 4" PERVIOUS CONCRETE 6" WASHED STONE SUBGRADE

SUBGRADE MUST BE EITHER SCARIFIED, RIPPED, OR TRENCHED TO MAINTAIN THE PRE-CONSTRUCTION SUBGRADE INFILTRATION RATE.

1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS BOTH ON AND ADJACENT T

3. GRUBBING AND STRIPPING: CONTRACTOR SHALL RAKE AND REMOVE ROOTS, STUMPS, VEGETATION, DEBRIS, EXISTING

5. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR OTHER WASTE MATERIAL SHALL BE REMOVED FROM SITE AND DISPOSED OF

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUT AND FILL QUANTITIES AND COMPLETE INSTALLATION TO SPECIFIED

7. THE CONTRACTOR SHALL NOTE THAT THE GRADING PLAN MAY NOT REPRESENT A BALANCED EARTHWORK CONDITION.

8. THE CONTRACTOR SHALL FURNISH SUITABLE BORROW MATERIAL FROM AN OFF-SITE PROPERLY PERMITTED FACILITY AS

o. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. IT SHALL BE THE

UTILITIES AT ALL CROSSINGS PRIOR TO COMMENCING TRENCH EXCAVATION. IF ACTUAL CLEARANCES ARE LESS THAN

10. NO CONSTRUCTION IS TO BEGIN BEFORE LOCATION OF EXISTING UTILITIES HAS BEEN DETERMINED, CALL "NC ONE-CALL"

OR IN PRIVATE EASEMENTS, THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE PERSONNEL OF THEIR INTENT TO

CONSTRUCTION. ANY CONDITION DISCOVERED OR EXISTING THAT WOULD NECESSITATE A MODIFICATION OF THESE PLAN

CONSTRUCTION. BEFORE COMMENCING ANY EXCAVATIONS IN OR ALONG ROADWAYS OR RIGHT-OF-WAYS, PUBLIC AREAS

THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE DISCONNECTION/ RECONNECTION AND/OR THE RELOCATION

15. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AT THE SITE. FURTHERMORE THE CONTRACTOR SHALL REPORT

18. ALL BACKFILL FROM UTILITY INSTALLATION MUST BE COMPACTED OR AMENDED TO PROVIDE TRAFFIC BEARING CAPACITY.

ENGINEER PRIOR TO INSTALLATION. ALL AREAS SHALL BE SLOPED TO DRAIN AWAY FROM BUILDINGS AT ALL TIMES.

22. ALL SIDEWALKS SHALL BE FREE OF CRACKS, BREAKS, OR ANY OTHER DEFECT PRIOR TO RECEIVING A CERTIFICATE OF

CONSTRUCTION OF SITE TO START WITH INSTALLATION OF CONSTRUCTION ENTRANCE, SEDIMENT TRAP, AND SILT FENCE

ALONG ALL LOCATIONS PER PLANS. UPON INSTALLATION OF SILT FENCE, TREES SHOULD BE REMOVED IN LOCATIONS AS

2. NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (1 VERTICAL TO 3

4. INSTALL PRIMARY EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING BUT NOT LIMITED TO

GRAVELED CONSTRUCTION ENTRANCE, SILT FENCE, CHECK DAMS, & INLET PROTECTION. INSTALL ALL SECONDARY

MORE STRINGENT MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF

2. ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN

SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET

CHECK SEDIMENT BASIN AND BAFFLES WEEKLY & AFTER EACH RAINFALL EVENT. REMOVE SEDIMENT FROM TRAP & BAFFLES AND RESTORE TO ORIGINAL VOLUME WHEN SEDIMENT ACCUMULATES TO ABOUT ½ THE DESIGN VOLUME.

DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW

ADDITIONAL 2 INCHES OF 2-3 INCH STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED,

PROTECTION, SEDIMENT TRAP BAFFLES, AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE

SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND

3. NO SEDIMENT WILL BE ALLOWED TO EXIT THE SITE. ALL EROSION SHALL BE CONTROLLED INCLUDING SIDE SLOPES

5. ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION TO BE

o. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT

EROSION CONTROL MEASURES AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION

ALL DISTURBED AREAS SHALL BE SEEDED IN ACCORDANCE WITH SEEDING SCHEDULE.

6. A 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.

MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.

MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.

WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.

REPAIR / REPLACE BAFFLES IF TORN, COLLAPSED, OR INEFFECTIVE.

BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.

NECESSARY. ALL SLOPED AREAS SHOULD BE SEEDED IN ACCORDANCE TO SPECIFICATIONS. SLOPE STABILIZATION IS WITHIN 21 CALENDAR DAYS OF ANY PHASE OF CONSTRUCTION. ALL OTHER AREAS MUST BE STABILIZED WITHIN 15 WORKING DAYS.

GENERAL CLEARING AND GRADING OF THIS SITE WILL NOT BE DONE UNTIL THE TEMPORARY SILT FENCE, SEDIMENT TRAP

20. CONCRETE FOR WALKS, CURBS AND DRIVES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS - AIR

21. FIELD TESTING SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY PAID FOR BY THE OWNER. FURTHER TESTING

MATERIALS, WORKMANSHIP AND ALL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH

16. THE CONTRACTOR SHALL PROVIDE ANY AND ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK UNLESS OTHERWISE

17. ALL SERVICE CONNECTIONS SHALL BE INSTALLED TO MEET ALL LOCAL, STATE, AND CFPUA CODES, METERS, TAPS.

GEOTECHNICAL ENGINEER TO BE CONSULTED AT CONTRACTORS COST AS NECESSARY.

19. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE

RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT ELEVATIONS AND LOCATIONS OF ALL EXISTING

INDICATED ON PLAN, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER BEFORE PROCEEDING WITH

SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING LITTLES DURING

13. CONTRACTOR SHALL ADJUST ALL MANHOLES, VALVE & CURB BOXES TO FINAL GRADE UPON COMPLETION OF ALL CONSTRUCTION. ANY BOXES DAMAGED OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED AT THE

. MUCKING: CONTRACTOR SHALL COORDINATE WITH OWNER AND THEIR GEOTECHNICAL REPRESENTATIVE TO

6. FILL AND COMPACTION SHOULD COMPLY WITH GEOTECHNICAL RECOMMENDATIONS

CONSTRUCTION.

COORDINATE REMOVAL OF ANY SOFT AREAS.

AT LEAST 48 HOURS BEFORE COMMENCING CONSTRUCTION.

OF ALL EXISTING UTILITIES WITH APPROPRIATE PERSONNEL.

EXCAVATE, IN WRITING, NOT LESS THAN 10 DAYS PRIOR TO EXCAVATING.

14. EXISTING SURVEYING PERFORMED BY JOHNNY J. WILLIAMS LAND SURVEYING, P.C.

ALL DISCREPANCIES OR QUESTIONS TO THE ENGINEER PRIOR TO INSTALLATION.

REQUIRED DUE TO A FAILED TEST WILL BE PAID FOR BY THE CONTRACTOR.

AND CONSTRUCTION ENTRANCES HAVE BEEN INSTALLED.

DURING AND AFTER CONSTRUCTION.

CLEANED WHEN HALF FULL.

IN A PROPERLY PERMITTED FACILITY.

EXPENSE OF THE CONTRACTOR.

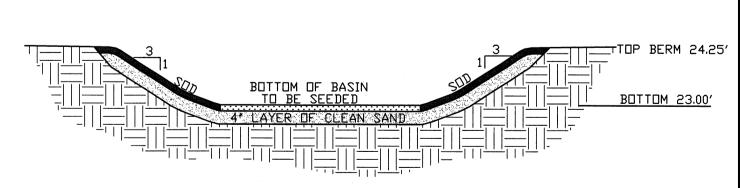
OCCUPANCY.

HORIZONTAL).

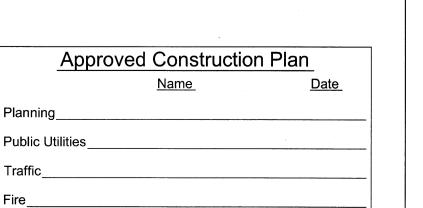
CONSTRUCTION SEQUENCE

STRUCTURES ABOVE AND BELOW GRADE, ORGANIC MATERIAL OR ANY OTHER UNSUITABLE MATERIAL WITHIN LIMITS OF

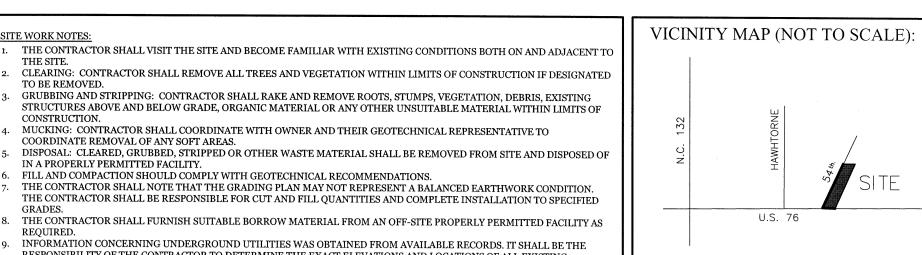
PERVIOUS CONCRETE SECTION



INFILTRATION BASIN # 1 & 2



STORMWATER MANAGEMENT PLAN **APPROVED** CITY OF WILMINGTON **ENGINEERING DEPARTMENT** DATE _____ PERMIT # SIGNED



REVISIONS

AL PL

LESE

DETAIL

CLIENT INFORMATION:

PENTON DEVELOPMENT LLC. 6105 OLEANDER DRIVE SUITE 201 WILMINGTON, NC 28403 (910) 452-1410

SHEET SIZE: CDCAPPROVED: CDC SCALE: PROJECT NUMBER: